

Notice of Allowability

Application No.

10/028,493

Examiner

Yves Dalencourt

Applicant(s)

JOHNSON ET AL.

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed 12/20/01.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ The drawings filed on 08 March 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/20/01 and 01/13
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

This office action is responsive to communication filed on 12/20/2001.

Allowable Subject Matter

1. Claims 1 – 3 are allowed.
2. The following is an examiner's statement of reasons for allowance: As specifically claimed, the art of record fail to teach, among other limitations, in combination, a method for dynamically adding nodes to a network subject to partitioning for which there is also a requirement that a quorum of nodes be present for file system operation, said method comprising the steps of initiating addition of proposed nodes to the configuration and establishing a second quorum value based on the existing number of nodes and the number of nodes to be added; and completing addition of at least one proposed node, to the configuration of nodes, based on said second quorum value and also upon a designation that said proposed node was part of said current configuration and updating said first quorum value to reflect the completed addition.
3. The closest prior art : US Patent Number 6,279,032 discloses an improved method and system for determining which member set of a partitioned cluster should survive to represent the cluster. The system and method allows a minority of a partitioned cluster's systems to survive and operate as the cluster. An arbitration method and system is provided that enables partitioned systems, including those in minority member sets, to challenge for representation of the cluster, and enables the automatic switching of cluster representation from a failed system to an operational

system. Temporal partitions are handled, and a single system may form a quorum upon restart from a total cluster outage. Such prior art fails to teach the claimed limitations as recited above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Short et al (US Patent number 6,279,032) discloses a method and system for quorum resource arbitration in a server cluster.

Hosseini Mooin (US Patent Number 6,108,699) discloses a system and method for modifying membership in a clustered distributed computer system and updating system configuration.

Frank et al (US Patent Number 6,532,494) discloses a closed-loop node membership monitor for network clusters.

Nishanov et al (US Patent Number 6,662,219) discloses a system for determining at subgroup of nodes relative weight to represent cluster by obtaining exclusive possession of quorum resource.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yves Dalencourt whose telephone number is (571) 272-3998. The examiner can normally be reached on M-TH 7:30AM - 6: 00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yves Dalencourt

Dalencourt
February 4, 2005

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